Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The number of strains in the 1921 and 1922 collections is rather small to draw conclusions from. The serological differences between them and the 1918–19 strains are so striking, however, that we believe that they represent a general transition in meningococci which is of sufficient interest to justify this preliminary report. It is particularly desirable that strains from other sections of the country be studied, to determine whether the change observed in the New York City strains is country-wide.

ADENOIDS.[1]

Nature intends that we should breathe through the nose and has so arranged that the air is strained, warmed, and moistened as it passes through the nose. This is very important. Unfortunately, about 10 per cent of all children have adenoids which interfere with free breathing through the nose; and since so many serious results follow such a condition, parents should learn something about adenoids and their treatment.

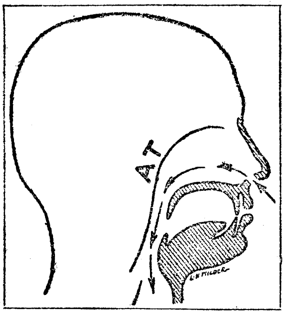


FIG. 1.

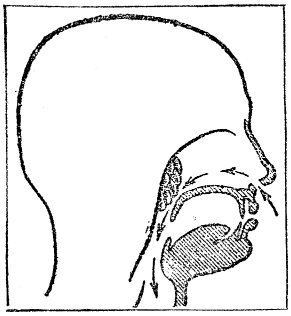


FIG. 2.

WHAT ARE ADENOIDS?

Because adenoids are located up behind the palate and are, therefore, out of sight, a better understanding of them may be had by studying the accompanying diagrams.

The course of the air through the nose, along back of the palate, and through the windpipe, is indicated by arrows in Figures 1 and 2. At the place marked "AT" (Fig. 1), nature has provided a kind of moist tissue cushion which helps to filter impurities out of the air. This cushion is formed of what is called "lymphoid tissue" and is very similar to that which makes up the tonsils. In a large number of children the amount of "lymphoid tissue" is greatly increased (the causes are not clearly known) and forms what are known as "adenoids." From the position of these adenoids as shown in Figure 2, it will readily be seen how easily they prevent the free passages of air through the nose.

---

[1] Revision of a health leaflet on adenoids originally issued for popular distribution as "Keep Well Series" No. 2.

WHAT ADENOIDS DO.

Owing to their position and structure, adenoids are not only specially subject to infection and inflammation, but they also interfere with breathing. It is easy to understand, therefore, that their harmful effects are produced in two ways: First, by the absorption into the system of poisonous material when they are infected; and, second, by mechanically interfering with the free passage of air through the nose. In fact, one of the first results of the growth of adenoids is mouth breathing, which is usually associated with a discharge from the nose. When this condition develops, the air breathed in reaches the throat and lungs in an unpurified condition. Moreover, it is not sufficiently warmed or moistened. The child is unable to blow his nose. In a short time children in such condition begin to suffer from repeated colds; the nasal discharge continues and takes on the character of a chronic nasal catarrh. Unless proper treatment is now undertaken, the condition soon grows worse, and the child's nasal breathing becomes more and more obstructed.

This is by no means all the harm that is done by adenoids. They affect the voice, which becomes hoarse and muffled; they give rise to night terrors, induce snoring, and greatly interfere with night rest because of the inability of the child to breathe freely while sleeping.

Through the development of chronic nasal catarrh, adenoids may lead to the loss of sense of smell.

At times the infection spreads from diseased adenoids and causes inflammation of the inner ear and deafness. Children are frequently made intermittently deaf by congested and swollen adenoids. This condition often leads to street accidents. The inability to hear not being a constant condition, occurring at times suddenly, the child fails to notice approaching vehicles while crossing the street and is injured.

Children who suffer from adenoids are usually pale, often have narrow and otherwise deformed chests, and altogether are not as strong and robust as normal children.

Acting mechanically, adenoids cause broadening of the root of the nose and disfiguration and other unpleasing alteration of the facial expression. The alteration of the facial expression is often so great that the child looks stupid and sometimes even almost imbecilic (Pl. I, *A*).

One of the chief disfigurements caused by adenoids is that of the jaws and teeth. This is well shown in Figure 3 and Plate I, *B.*

It will be noticed that the teeth of the upper jaw stick out and are not covered by the lip as they should be. In these cases the roof of the mouth, that is, the palate, is narrow and highly arched, and the two jaws do not come together as they do in normal persons. This condition is called malocclusion. Usually, too, the teeth of the upper jaw are irregular and crowded.

The malformation of the teeth thus produced by adenoids may lead in turn to other serious conditions, among them the chronic disease known as pyorrhea, various forms of root infection, and chronic indigestion.

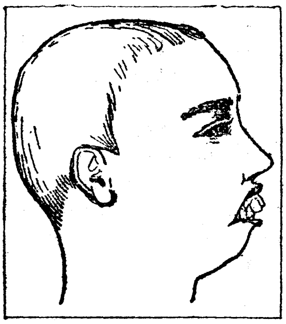


FIG. 3.

HOW TO RECOGNIZE THE CONDITION.

The presence of adenoids should be suspected if the child habitually sleeps with open mouth, snores a great deal, or has frequent strangling coughing spells. Sleeping with open mouth is one of the first signs and should, therefore, lead at once to a careful examination by a physician. Sometimes difficulty in hearing is one of the early symptoms. Therefore, in all cases of ear trouble an examination should be made for adenoids.

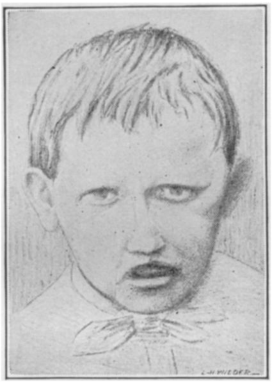
WHAT TO DO.

Adenoids should be removed whenever they are large enough to give rise to marked symptoms, such as habitual mouth breathing muffled voice, deafness, disturbed sleep, alterations of the facial expression, chronic nasal discharge, frequent attacks of sore throat and "cold in the head," bronchitis, and recurring attacks of "earache" and discharge from the ears. Especially should adenoids in young children be removed, for with them it is probable that the condition will grow worse.

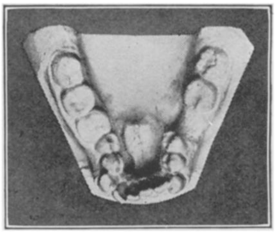
The operation is a simple one and not dangerous. It should be performed under anesthesia. Relief is immediate and the health and strength of the child usually improve rapidly afterwards. It is wrong to delay having the operation done, for the presence of adenoids not only endangers the child's health, but a few months' delay may cause considerable malformation of the jaws, palate, nose, and face.

A study of the accompanying photographs (Pl. I, *C* and *D*) of the same patient before and after treatment for adenoids will show what can be done by proper treatment.

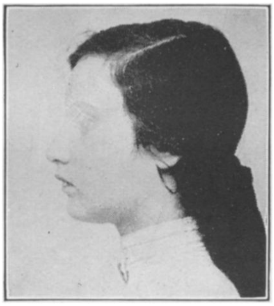
PLATE I.



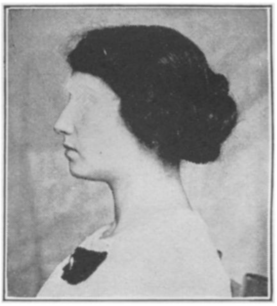
A. Stupid expression associated with adenoids.



B. Disfigurement caused by adenoids.



C. Before treatment for adenoids.



D. After treatment for adenoids.